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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/078,419
Filing Date: February 21, 2002
Appellant(s): LAL, AMRISH K.

Amrish K. Lal
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9/18/06 appealing from the Office action mailed 2/16/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,253,204

Glass

6-2001

Laiho et al., PCT/FI00/00074 or WO 00/46696, (August 10, 2000)

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glass et al. (U.S. Patent 6,253,204 referred to as Glass) in view of Laiho et al. (PCT/FI00/00074 or WO 00/46696).

For claim 1, Glass teaches, a system for correcting links to resources in a network, comprising:

a link checking service unit associated with a first group of resources and configured for determining if a location of a resource among the first group of resources has changed; and

a link correction service unit configured for sending a request to the link checking service to determine validity of a link, receiving a response indicating a status of the link, and modifying a document containing (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

Glass fails to clearly disclose, link based on the received response

Laiho teaches, link based on the received response (see Laiho page 7)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Glass's method of finding broken links and Laiho process of finding the location of incorrect links and correcting them. Glass provides for a method of healing links and Laiho provides for a method of automatically correcting invalid links and providing a "correction message." (Glass, Col.1 lines 52-55, Col. 4 lines 56-59, Col. 5 lines 15-20, Col. 5 lines 26-35) and (see Laiho pages 3, 8, 7)

For claim 2, Glass-Laiho teaches, the system of claim 1, wherein said document is a World-Wide Web page, and said link is a hypertext link. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 3, Glass-Laiho teaches, the system of claim 1, wherein the link checking service unit sends a response message containing a current location of said resource if the location of said resource has changed, and the link correction service, in response to receiving the response message changing a document containing the link to indicate the current location of the resource. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

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For claim 4, Glass-Laiho teaches, a method of correcting a link in a document, comprising:

 sending a request to a link checking service unit to check a status of a resource corresponding to the link;

 receiving a response to said request, the response containing an indication of a changed location of the resource; and

 changing the document based on the indication of the changed location of the resource. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 5, Glass-Laiho teaches, the method of claim 4, wherein the response further includes a link status code indicating a status of the resource. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 6, Glass-Laiho teaches, the method of claim 4, wherein the document is a World-Wide Web page and the link is a hypertext link. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 7, Glass-Laiho teaches, the method of claim 4, wherein the link includes a first uniform resource locator (URL) and the indication of the changed location of the resource includes a second URL, wherein the document is changing by changing the first URL in the link to the second URL. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 8, Glass-Laiho teaches, the method of claim 4, wherein the document is changed by automatically deleting the link in the document if the response does not include a replacement link and contains a link status code indicating that the link is invalid.

(Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 9, Glass-Laiho teaches, the method of claim 4, wherein said sending a request, receiving a response, and changing the document are performed in a web server. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 10, Glass-Laiho teaches, an apparatus for correcting a link in a document, comprising:

- a document repository having stored therein one or more documents;
- a corrected document repository having stored therein one or more corrected documents;
- a link correction service unit connected to the document repository and the corrected document repository, and configured to parse a link from one of the documents in the document repository, generate a request for checking the validity of the link, correct the link in response to receipt of a response message containing a corrected link, and store a corrected document having the corrected link in the corrected

document repository. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines12-43)

For claim 11, Glass-Laiho teaches, the apparatus of claim 10, wherein the apparatus is part of a web server. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines12-43)

For claim 12, Glass-Laiho teaches, the apparatus of claim 10, wherein the link is a hypertext link containing a uniform resource locator (URL) and the document is a web page. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines12-43)

For claim 13, Glass-Laiho teaches, an apparatus for correcting a link in a document, comprising:

- means for sending a request to a link checking service unit to check a status of a resource corresponding to the link;

- means for receiving a response to said request, the response containing an indication of a changed location of the resource; and

- means for changing the document based on the indication of the changed location of the resource. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines12-43)

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For claim 14, Glass-Laiho teaches, a computer readable medium of instructions suitable for execution by a computer, comprising:

program instructions for sending a request to a link checking service to check a status of a resource corresponding to the link;

program instructions for receiving a response to said request, the response containing an indication of a changed location of the resource; and

program instructions for changing the document based on the indication of the changed location of the resource. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 15, Glass-Laiho teaches, a method for determining a status of a link in a document, comprising:

receiving a request to determine the status of the link in the document, wherein the link includes a location indicator of a resource;

detecting if the resource is present within a storage unit at a location indicated by the location indicator;

determining if the resource is present at an alternate location if the resource is not detected in the location indicated by the location indicator; and

returning an alternate location identifier indicating the alternate location of the resource if the resource is determined to be present at the alternate location. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43) and (see Laiho,

page 7 and 8) The same motivation that was utilized in the rejection of claim 1, applies equally as well to claim 15.

For claim 16, Glass-Laiho teaches, the method of claim 15, wherein the link is a hypertext link and the location indicator of the resource is a uniform resource locator (URL). (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 17, Glass-Laiho teaches, the method of claim 16, wherein the resource is a web page. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 18, Glass-Laiho teaches, the method of claim 16, further comprising returning a link status code indicating whether the resource is present in the storage unit. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 19, Glass-Laiho teaches, the method of claim 18, wherein the link status code indicates whether the resource has been deleted from the storage unit. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 20, Glass-Laiho teaches, the method of claim 15, wherein said determining if the resource is present at an alternate location is performed by consulting a mapping table associating a first location indicator with a second location indicator, wherein the first location indicator indicates a prior location of the resource and the second location indicator indicates a present location of the resource. (see Laiho, page 4 and 7-9) The

same motivation that was utilized in the rejection of claim 1, applies equally as well to claim 15.

For claim 21, Glass-Laiho teaches, the method of claim 20, wherein the first and second location indicators are uniform resource locators (URLs). (see Laiho, page 4 and 7-9)The same motivation that was utilized in the rejection of claim 1, applies equally as well to claim 15.

For claim 22, Glass-Laiho teaches, an apparatus for correcting a link in a document, comprising:

a document repository having stored therein one or more documents;
a mapping table unit having stored therein mapping table information associating a first prior resource-locator with a first present resource-locator, the first prior resource-locator indicating a prior location of a first resource within the document repository and the first present resource-locator indicating a present location of the first resource; and
a link checking service unit connected to the document repository and the mapping table unit, and configured to locate an entry in the mapping table information based on a requested resource-locator contained in a request for information concerning location of the first resource, to identify the first present resource-locator stored in association with the first prior resource-locator, and to send a response message containing the first present resource-locator. (see Laiho, page 4 and 7-9)The same motivation that was utilized in the rejection of claim 1, applies equally as well to claim 15.

For claim 23, Glass-Laiho teaches, the apparatus of claim 22, wherein the first prior and first present resource-locators are uniform resource locators (URLs). (see Laiho, page 4 and 7-9)The same motivation that was utilized in the rejection of claim 1, applies equally as well to claim 15.

For claim 24, Glass-Laiho teaches, the apparatus of claim 22, wherein the mapping table further includes a second prior resource-locator indicating a location of a second resource and a status code indicating a status of the second prior resource-locator. (see Laiho, page 4 and 7-9)The same motivation that was utilized in the rejection of claim 1, applies equally as well to claim 15.

For claim 25, Glass-Laiho teaches, the apparatus of claim 24, wherein the status code indicates that the second resource corresponding to the second prior resource-locator has been deleted. (see Laiho, page 7 and 9) The same motivation that was utilized in the rejection of claim 1, applies equally as well to claim 15.

For claim 26, Glass-Laiho teaches, the apparatus of claim 24, wherein the status code indicates that the second prior resource-locator indicates a present location of the second resource in the document repository. (see Laiho, page 7 and 9) The same motivation that was utilized in the rejection of claim 1, applies equally as well to claim 15.

For claim 27, Glass-Laiho teaches, the apparatus of claim 22, wherein the apparatus is part of a web server. (see Laiho, page 4 and 7-9) The same motivation that was utilized in the rejection of claim 1, applies equally as well to claim 15.

For claim 28, Glass-Laiho teaches, an apparatus for determining a status of a link in a document, comprising:

- means for storing one or more resources;

- means for receiving a request to determine the status of the link in the document, wherein the link includes a location indicator of a resource;

- means for detecting if the resource is present within said means for storing at a location indicated by the location indicator;

- means for determining if the resource is present at an alternate location if the resource is not detected in the location indicated by the location indicator; and

- means for returning an alternate location identifier indicating the alternate location of the resource if the resource is determined to be present at the alternate location. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 29, Glass-Laiho teaches, a computer readable medium of instructions suitable for execution on a computer for determining a status of a link in a document, comprising:

program instructions for receiving a request to determine the status of the link in the document, wherein the link includes a location indicator of a resource;

program instructions for detecting if the resource is present within a storage unit at a location indicated by the location indicator;

program instructions for determining if the resource is present at an alternate location if the resource is not detected in the location indicated by the location indicator; and

program instructions for returning an alternate location identifier indicating the alternate location of the resource if the resource is determined to be present at the alternate location. (Glass, Col. 4 line 56 to Col. 5 line 20, Col. 5 lines 20-62, Col. 6 lines 12-43)

For claim 30, Glass-Laiho teaches, the system of claim 4, wherein the changing of the document is performed automatically. (Glass, Col. 1 lines 30-55)

(10) Response to Argument

In reviewing appellant's arguments the deficiency of the prior art in reference to claim 1, then repeats a portion of the argument in reference to other independent claim in the present application. Therefore examiner has structure the response in addressing the topics in the order that the appellant has provided even though some repetitions occurs.

In reviewing the appellant's summary of the prior art appellant overlook one key factor that the link of Glass is the same as the hyperlink URL of Laiho. This is knowledge one of skill in the art is aware of and anyone is able to discern from reading the reference with a basic knowledge in the field of the present invention.

Appellant argues that Glass teaches, "file not found" which is not the same as "link checking service unit associated with a first group of resource and configured to determining if a location of a resource among the first group of resource has changed." Appellant argues that "file not found" could be interpreted "when the network traffic is heavy and requesting site fails to retrieve the file within the time limit set by a timer" or the "server hosting the file is temporarily down." There are to fallacy with this interpretation. First the claim limitation make use of "comprising" not limiting the operation of the system to only correcting links of system where the file has been moved, which the appellant concedes that a "file not found" message is returned if a file is moved on page 17 line 7 of his remarks. Second as the appellant describes in the summary of the invention on page 7 lines 4-8 the present invention is directed to correcting broken link, Glass is discloses identifying these broken links. "File is not found" for any of the reason stated by the appellant: the file not being able to be retrieved within time, the system not operating at time of connection, or the file not at the correct location, would all be reason why a link would be broken. Also Glass also identifies that multiple attempts are made to utilize the link to verify that the link is actual broken (Glass, Col. 7 lines 20-30). In addressing the deficiencies of appellant's interpretation of Laiho, appellant argues that providing Laiho states "URL points to a

location on the network server which is no longer valid, i.e. because the web page previously maintained at that location has been move to a new location" (Laiho page 7 line8. Laiho clearly state a link is not valid if the link is addressing an item that has moved.

Appellant argues hindsight reasoning; this would be true if the examiner provide motivation without considering the state of the art at the time of the invention. But this is not an issue since the motivation is provided by the reference which is prior to the invention and therefore not hindsight reasoning. Laiho states "in particular, it is an object of the present invention to correct or facilitate the correction of an incorrect hyperlink" (Laiho, page 2 lines 23-25). From the prior art it is clear the motivation of the invention is to resolve broken links, to return the website to normal operation (Glass, Col. 8 lines 10-17).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the reference provided motivation to combine the references.

For claims 2,3,4,13, and 14 appellant relies upon the argument that were addressed above.

Appellant in addressing claim 10-12 discusses "a document repository having stored therein one or more documents; a corrected document repository having stored therein one or more corrected documents." Appellant argues that the prior art presented does not teach this limitation. Presently as the limitation is written the present claim limitation does not address if the files are same in both repositories or if the event referrer to the same subject matter, or if they are even different repositories. Examiner has interpreted broadest possible interpretation in light of the specification. The specification only refers to a single HTML repository.

Appellant argues motivation for claims 15-29. Examiner has address motivation and hindsight above. Additionally applicant argues that the prior art is not compatible. In the motivation examiner has pointed to portion of both reference that allow for the other system to operate as a single system. Addition appellant has selected not cited embodiments of both system and claimed that they are incompatible with not bases or clear reason. Appellant merely states that they system are different and therefore not

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compatible. One of skill in the art reviewing the prior art would combine the reference into a compatible system, since both system allow for operation of the system in concert.

For the remaining claims 16-21 and 23-27, 28-29 appellant relies upon the same addressed arguments addressed above.

Therefore in conclusion the combination of Glass and Laiho with motivation provided by the references is unpatentable over the prior cited art.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Ajay Bhatia



Conferees:



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